

APPARATUS AND METHOD FOR REDUCING POWER CONSUMPTION  
IN WIRELESS RF SYSTEMS

## ABSTRACT OF THE DISCLOSURE

5 A radio frequency (RF) transceiver having improved low power  
operating modes. The RF transceiver comprises: 1) a radio  
frequency (RF) modem section comprising: a) receive path  
circuitry for receiving and down-converting an incoming RF signal  
to thereby produce an incoming baseband signal; and b) transmit  
path circuitry for receiving and up-converting an outgoing  
baseband signal to thereby produce an outgoing RF signal; 2) a  
baseband section comprising baseband circuitry for receiving and  
processing the incoming baseband signal and for generating the  
outgoing baseband signal; and 3) a power-saving apparatus for  
determining that the baseband section is idle and, in response  
15 to the determination, reducing a power supply voltage providing  
power to the baseband section.